

a capacitor associated with said transistor and lying adjacent thereto, said capacitor having a stacked structure of two electrodes separated by a capacitor dielectric,

wherein said gate region has a first inorganic layer and a second, polymer or spin-on glass layer, of which layers only the polymer or spin-on glass layer extends to said capacitor to define said capacitor dielectric.

6. (Amended) A liquid crystal display comprising:

a plurality of pixels each having a switching transistor, a storage capacitor of capacitance C_{store} , and liquid crystal material of capacitance C_{LC} , said transistors having insulated-gate staggered structures with substantially coplanar source and drain regions on said substrate, a gate region, and a gate insulator lying between said gate region and said source and drain regions, said capacitor having a stacked structure of two electrodes separated by a capacitor dielectric,

wherein said gate region has first and second layers, of which layers only the second extends to said capacitor to define said capacitor dielectric, and wherein the thicknesses of said first and second layers are selected such that the charging time constant of each pixel is invariable to first order changes in the thickness of second layer defining the capacitor dielectric.

10. (Amended) A method of manufacturing a transistor substrate for a liquid crystal display, comprising providing an array of transistors and capacitors over the substrate, said transistors having insulated-gate staggered structures with substantially coplanar source and drain regions, a gate region,

and a gate insulator lying between said gate region and said source and drain regions on said substrate; and said capacitors having a stacked structure of two electrodes separated by a capacitor dielectric,

wherein said gate region is deposited as first and second layers, a first layer being deposited by vacuum deposition process, and a second layer being deposited by a non-vacuum process, said first layer being patterned to remove it from areas corresponding to said capacitors, and said second layer extending to the areas corresponding to said capacitors to define said capacitor dielectric.

11. (Amended) A method of manufacturing a liquid crystal display, comprising manufacturing a transistor substrate using the method of claim 10, and providing liquid crystal material over said transistor substrate,

wherein said first layer is deposited to a thickness d_1 , and said second layer is deposited to a thickness d_2 , the thicknesses being selected such that the charging time constant of each pixel is invariable to first order changes in the thickness of second layer defining the capacitor dielectric.

NEWLY ADDED CLAIMS

13. (Newly added) A transistor substrate as claimed in claim 1, wherein said gate insulator and said first inorganic layer are patterned using the same mask to define a semiconductor island forming a transistor body.
